PORTAGE COUNTY AMATEUR RADIO SERVICE

The RADIOGRAM

Official Newsletter of the Portage County Amateur Radio Service, Inc.

PCARS - 2018 Hamvention© Club of the Year

VOLUME 20 - NUMBER 01 - JANUARY 2025

PORTAGE COUNTY AMATEUR RADIO SERVICE

PCARS K8BF

The Club that puts the FUN in Ham Radio!

ARRL SPECIAL SERVICE CLUB

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PCARS 2025 Officers

President
Jim - AC8NT

Vice President
Russ - NR8W

Treasurer
Paul - KE8EGF

1-Year Trustee
Mike - KB8TUY

2-Year Trustee
Gene - W8NET

3-Year Trustee
Tom - KB8UUZ

PORTAGE COUNTY AMATEUR RADIO SERVICE

Past President
Mike - KP4VZ

Freeze Your Acorns Off

Saturday
Feb. 15th
Fred Fuller
Park in Kent

Set up 9 am
on-air until
3 pm

BE THERE

Let's show Mother Nature we're tough....
Wear your Hawaiian shirt

From The PCARS President

Jim, AC8NT
PCARS President

First, I must thank Mike, Ken and the entire 2024 board their fine work. It was a great year of activities. The sale of our excess equipment covered the needed furnace replacement and a lot more. They left us in great shape for 2025.

We also need to thank Family and Community Services. They helped financially with the furnace replacement and replaced the leaking window in the VHF room. They continue to be a great landlord.

It is an honor and privilege to once again be president of one of the greatest ham radio clubs in the US. Over the next month we will be making plans for 2025. Included will be builds, great speakers at our meetings, and some serious fun at our annual events. However, to make this happen the board will need your help. Please let me know if you want a particular build, meeting speaker, or event. WE NEED YOUR IDEAS!!! You can always reach me by email at AC8NT@j3solutions.com.

Already on the calendar are two fun events. On January 18th Gene, W8NET has organized a PCARS Winter ParkPedition at Wingfoot Lake. I know it may be cold (count on it) but getting together with our club mates always makes for a fun time. Heated tents will also be a hit. We have FYAO (Freeze Your Acorns Off) on Saturday February 15th. This is always a fun day making contacts; eating some great food; and talking with friends. I'm looking forward to both.

We need a club secretary. This is an appointed position with the following responsibilities:

- Taking and publishing the minutes of both Board and Monthly Meetings
- Managing membership. That includes receiving and processing new members and maintaining the membership database.

You will need access to a Windows PC with Word and Excel. Lots of help will be provided to reduce the workload especially with the membership database. PLEASE consider volunteering for this position. If interested, simply send me an email.

I am looking forward to a great year with lots of fun. Again, if you have any ideas for events, builds or speakers, let me know.

From The Outgoing PCARS Vice President

Ken, WA8LRW

December

The monthly Meeting was the Holiday Dinner with great participation. The end of December marks the end of my term as vice president and the last of my late Radiogram contributions. I want to thank all the members for their support and help. I have special thanks to the speakers, the antenna committee, the FieldDay committee, and Mike Gonzalez, whose energy made it all possible.

Upcoming Events:

January

- POTA at Wingfoot Lakes January 18
- Monthly Meeting January 13

February

- VE Test Session February 1
- Monthly Meeting February 10
- Freeze Your Acorns Off 2025 February 15

From The New PCARS Vice President

Russ, NR8W
PCARS Vice President

I would like to take this opportunity to introduce myself. I am NR8W Russ. I have been a Ham and member of PCARS for 15 years. I graduated from high school in 1969 and enlisted in the U. S. Marines. I am a Viet Nam vet and spent 6 years on active duty and a year in the reserves.

I worked for the phone company for 10 years and the power company for 5. During that time I also did 13 years in the National Guard. I married my beautiful wife in 1970 and have 2 children and 2 grandchildren. We're about to celebrate our 55th wedding anniversary.

I'm a retired journeyman electrician with 25 years. As Christmas and New Years are almost upon us, I'd like to wish everyone a Merry Christmas and a Joyous New Year. I will strive to do my best as your incoming Vice President. Please feel free to ask me for help on any ham or electrical or electronic problems you might have. I look forward to having a wonderful time with the club and ham radio in the 2025.

PORTAGE COUNTY AMATEUR RADIO SERVICE, INC
PCARS
Est. 2005

PCARS Supports Center Of Hope

Mike, KP4VZ
PCARS Past President

On December 12, our past president Mike Gonzalez (KP4VZ), alongside our treasurer Greg Ash (KA8TOA), presented a check for $17,178.51 to Mark Frisone, the executive director of Family & Community Services. This amount was raised through the dedicated efforts of club members and the broader community, providing significant support to Portage County over the years. We extend our gratitude for your continued support.

An article detailing this event was published by the Weekly Villager, which can be accessed at https://weeklyvillager.com/radio-club-donates-over-11000-to-center-of-hope/.

Portage County Amateur Radio Service, Inc.

PCARS - K8BF

"Freeze Your Acorns Off"
(FYAO) Special Event Station

Where: Fred Fuller Park - 497 Middlebury Rd., Kent, OH at the Roy Smith Shelter House

When: Saturday February 15, 2025. Setup starts at 9 AM.

Operating Time: 10 AM - 3 PM EST.

We will be active on CW & Phone in the general areas of the 6, 10, 15, 20, 40 and 80-meter bands (repeater and EchoLink on the K8BF echo link node for a certificate) and anything else we can get working!

Contact our Club Callsign K8BF for a certificate. Other participating stations will be using their own callsign/FYAO or calling "CQ FYAO" (only stations at the Freeze Your Acorns Off event should use the / FYAO designator).

Yes, we'll be braving the cold weather of North Eastern Ohio to set up QRP stations using portable power and antennas.

Uniform of the day: Aloha or Hawaiian Shirts.

So, from the comfort of your warm radio shack - give us a contact while we're out freezing. We'll need all the contacts we can make to help keep us warm. Your support will be very much appreciated!

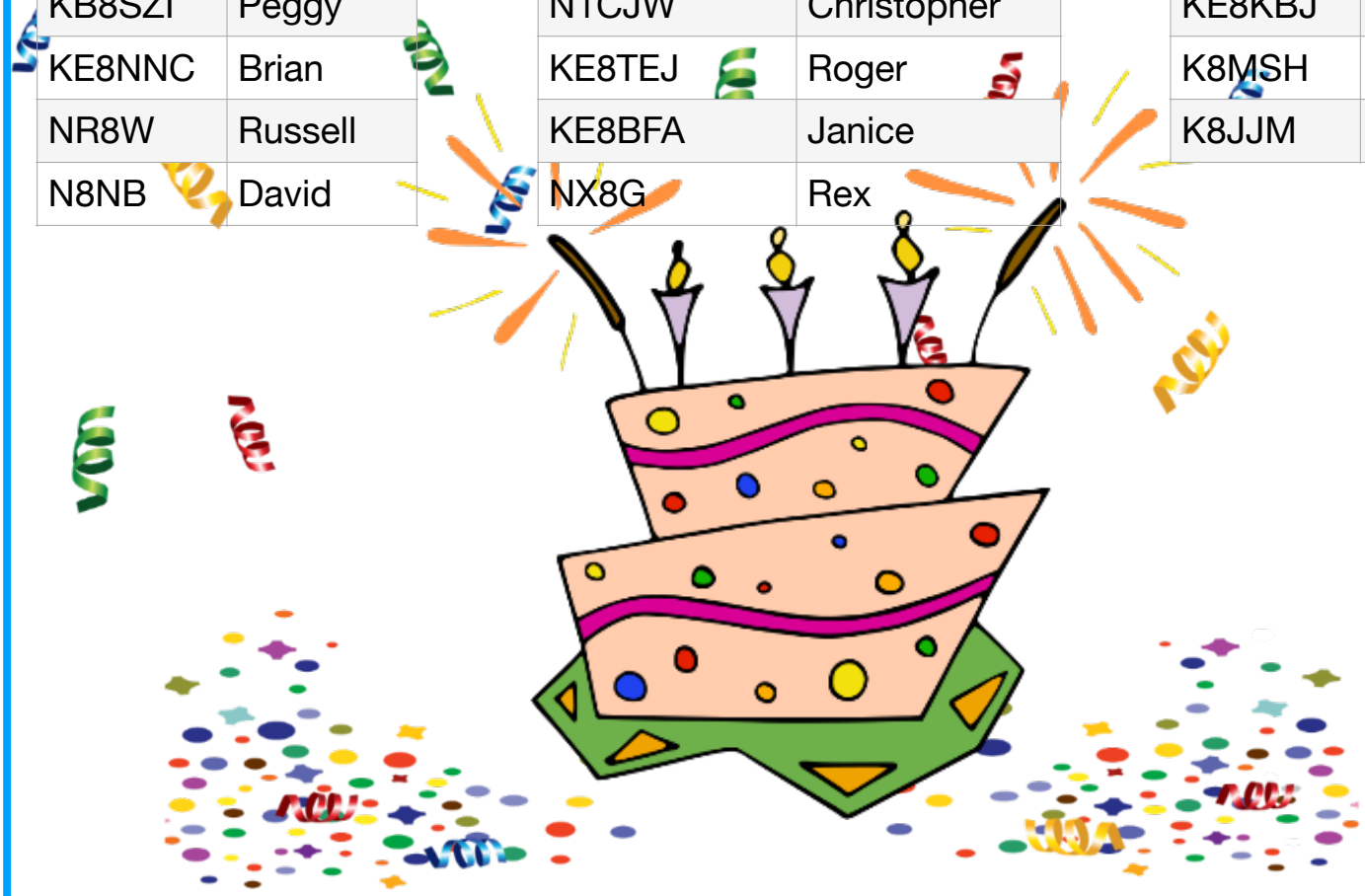
QSL for Card and Certificate via QRZ.com address for K89BF

Happy Birthday PCARS Members

K8WTF	Matt
KB8SZI	Peggy
KE8NNC	Brian
NR8W	Russell
N8NB	David

KB8ZWT	Jeff
N1CJW	Christopher
KE8TEJ	Roger
KE8BFA	Janice
NX8G	Rex

N8GIE	John
KE8KBJ	Mara
K8MSH	Mark
K8JJM	Jeffrey



From Around The World…

Ham Map: A map for WWFF, POTA, and SOTA locations and activity.
https://ham-map.com/

WSPR.Live: A pile of analytics and visualizations for WSPR data collected in real time.
https://wspr.live

DLARC: Digital Library of Amateur Radio & Communications. This is THE archive of digitized documents from the hobby. Spend some time browsing the collection. You won't b sorry!
https://archive.org/details/dlarc

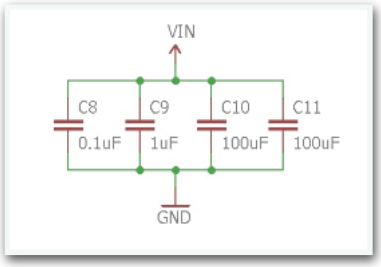
My QMX+ Adventure: A little bit of insight into the QMX+ kit by a not-always-successful kit builder and ham radio enthusiast. *Ed. Note: Yeah, it's by me. But Amateur Radio Weekly thought it was cool so I thought I'd share it here.*
https://www.kc8jc.com/2024/12/20/my-qmx-adventure/

Morse Code: Ready to Transmit. A BBC story covering the Morse Code championships in Tunisia.
https://www.bbc.co.uk/programmes/p0k8y9kq

Tech Tip: More to Parallel Capacitors

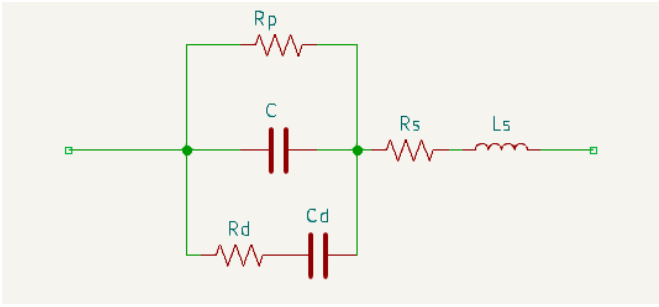
Jim, AC8NT

With most of my Tech Tips, this one is the result of a question from a student (also a ham). He could not understand the parallel combinations of capacitors found on circuit boards. He showed me the following example from and ESP32-S3 schematic.

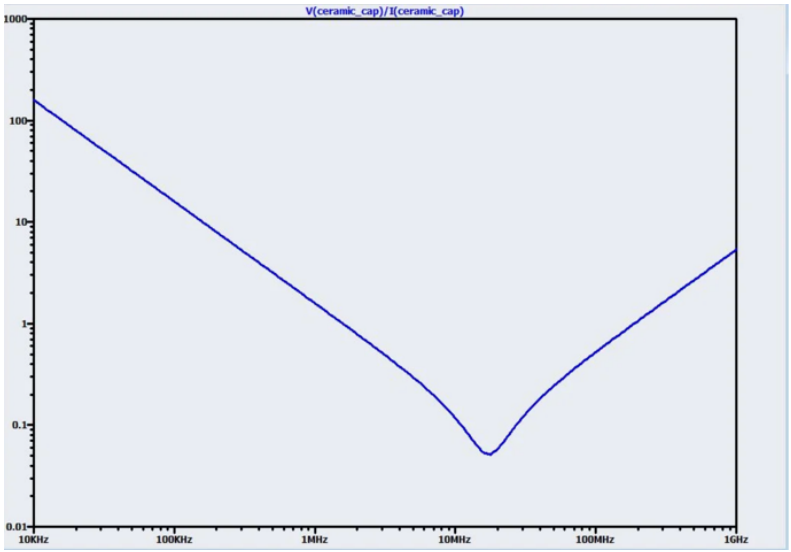


Why add the little capacitors in parallel with those 100 uf capacitors. What difference did 1.1 uf add to 200 uf? To understand the answer to that question we need to know what they are trying to accomplish and the details of how they work.

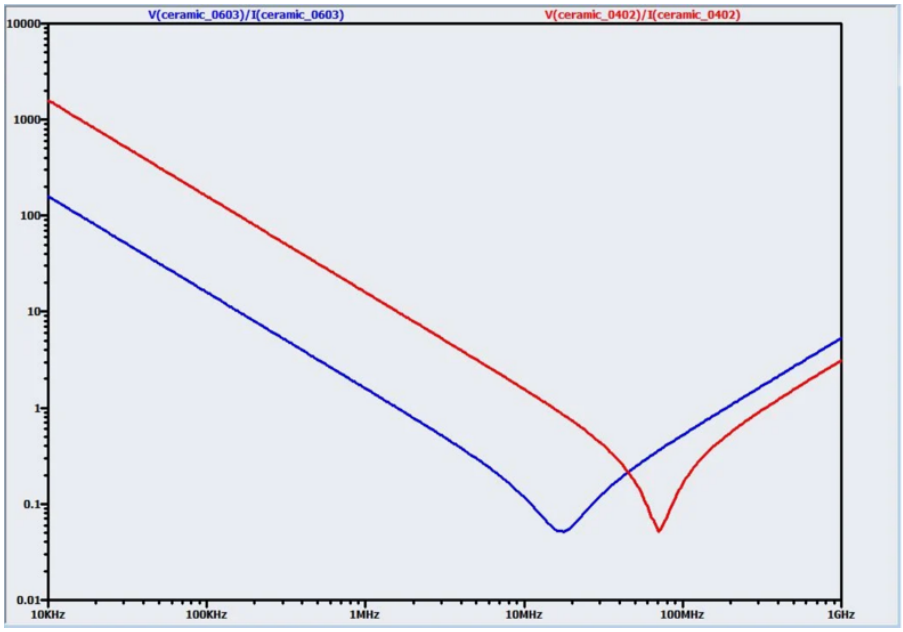
We need capacitors on power source lines to bypass noise coming from the power supply source and from the circuits we are powering. Noise from power supplies is usually low frequency, under 100 KHz. Whereas noise from digital circuits can extend to over a gigahertz. We need to filter both types to have effective designs.



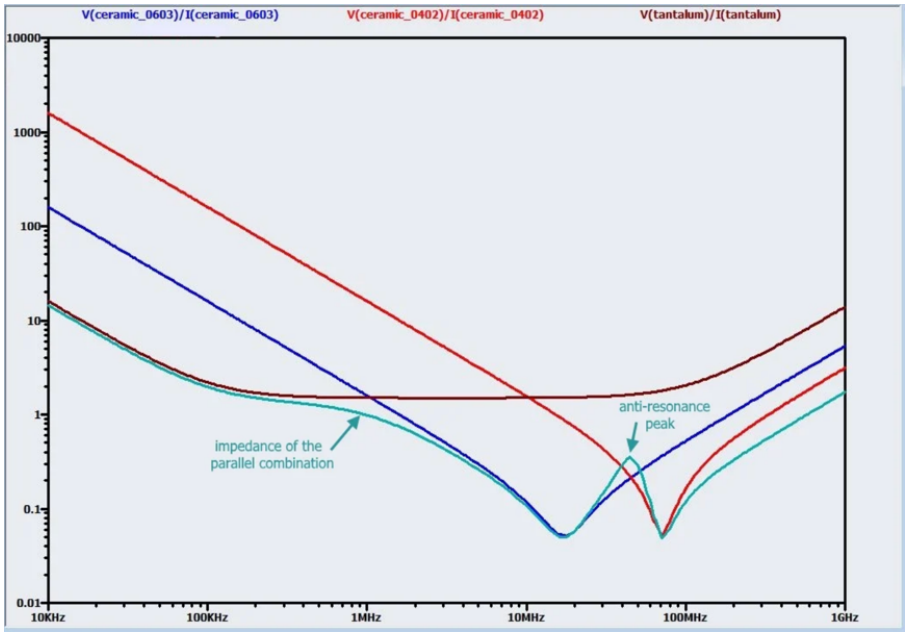
We also need to know the design nuances of capacitors. The diagram left shows a detailed model of a capacitor. We normally think of a capacitor as just containing capacitance. In fact, it contains capacitance, inductance and resistance. The key elements in the above diagram for bypass capacitors are C (the capacitance), Rs (the series resistance usually very small) and Ls (the series inductance). We will ignore the rest of the elements for this discussion. The series resistance is a function of the material used in the dielectric and the biggest contributor to the inductance is the capacitor's package. For surface mount capacitors, the larger the package the larger the inductance. We also know that the impedance of a capacitor is $1/(2\pi fC)$ and the impedance of an inductor is $2\pi fL$. As frequency goes up the impedance of a capacitor goes down and as the frequency goes up the impedance of an inductor goes up. If there is more capacitance than inductance, the impedance of the above circuit goes down. If inductance exceeds capacitance the impedance climbs. Note the following curve of a .1 uf ceramic capacitor with a series inductance of 850 pH and 50mW. The impedance goes down as frequency increases until about 20 MHz. From there it goes up. This capacitor will bypass more of the high frequency noise under 20 MHz than above 20 MHz.



Now lets compare the .1 uf capacitor to a .01 uf capacitor with only 500 pH of inductance.



The impedance of the smaller .01 uf capacitor is less than that of the .1 uf over about 50 MHz. The two in parallel will increase the frequence of effective bypass. Now add a 1 uf tantalum capacitor with 2200 pH of inductance in parallel the two ceramic capacitors. The bathtub curve the following diagram is the impedance of the tantalum capacitor. Note the impedance of paralleling all three is shown in green. It took three capacitors to effectively filter both the power supply noise and the digital switching noise. That is why we need a combination of capacitors to effectively filter noise.



As you can see, inductance play an important role in noise management. Therefore, capacitors should be placed as close as possible to the noise source, so traces don't add additional inductance. High frequency bypass capacitors are usually located as close to the power pin of integrated circuit as possible. Remember, that schematic diagrams supply no information on the location of parts. Look at the board to see where the parts are located. Also note that to keep inductance down the capacitors must be very small. In the examples above the parts were 603 (1.5mm x .8mm) and 402 (1mm x .5mm). Small inductance capacitors almost always require surface mount parts.

I hope this add a little information to your electronic knowledge database. Special thanks to Robert Keim for the great graphs.

On The Road with WG8X

John, WG8X

Hello, how was your Christmas? Did you get any Ham Related goodies? Lord knows, there's lots of items out there that are specifically targeted to the Ham Radio op who is into portable operating. I asked for a new keyboard & mouse for the shack computer. I don't know if that counts as Ham Radio oriented. I do have the new-to-me link dipole that I mentioned in last month's column. I have to say that I'm very happy with that, even if it is tuned to the wrong part of the band.

A few weeks ago, I headed out to the local State Wildlife area to test it out on an activation. I headed out to the site, tossed the center over a tree limb about 15' above the ground, with the ends sloped down to some fence posts that I'd brought with me. I was getting quite good reports from all over.

After about an hour, a guy pulls into the lot and offers me $5 to tear down & leave, so he could have a "date" with his "wife". I was ready to leave anyway, so I left. No, I did not take the guys money. Sometimes, it's better to just pack up & leave.

Since I've joined the "Activated Them All" club, I'm really no longer interested in trying to activate a huge number of parks on each trip. I'd rather take my time, making plenty of contacts. Tune in next month to read all about my planned adventure to Hocking, Vinton, & Athens counties.

I use the same N3FJP ACLog file for both my general & POTA logging. Since I use the program on 3 different computers (not at the same time), each computer opens the same data file that is synced between the machines and the cloud. It usually works pretty well.

But, each year, I decide that I'm going to save money by quitting my DropBox account. I spend several hours copying my files over to iCloud. Ultimately, I wind up remembering why I like Dropbox, and dislike iCloud. So, my yearly ritual of wasting a weekend on useless file transfers has been put behind me for another year.

The following weekend, I had a free Sunday afternoon. So I headed east. The final destination was a State Game Land in Beaver County, PA. The Google Maps destination took me to a gated service road that was clearly marked No Parking. Luckily, I managed to find a good parking area a couple miles further up the road. This is a great example of why it pays to do your homework. Before heading out to a new location.

Last weekend, I took a drive in the country and headed to Leesville Lake. Leesville is in Southern Carroll County. The conditions weren't bad, but not great either. I made 11 contacts, and headed home. I was using my mobile.

Call me OCD if you must, but for the last few years, I've kept a log of my activations. It is mostly a record of where I went, what county I was in, the Grid, and whether remembered to upload to both POTA & WWFF. It is really useful when I return to a location, to be able to pull my history.

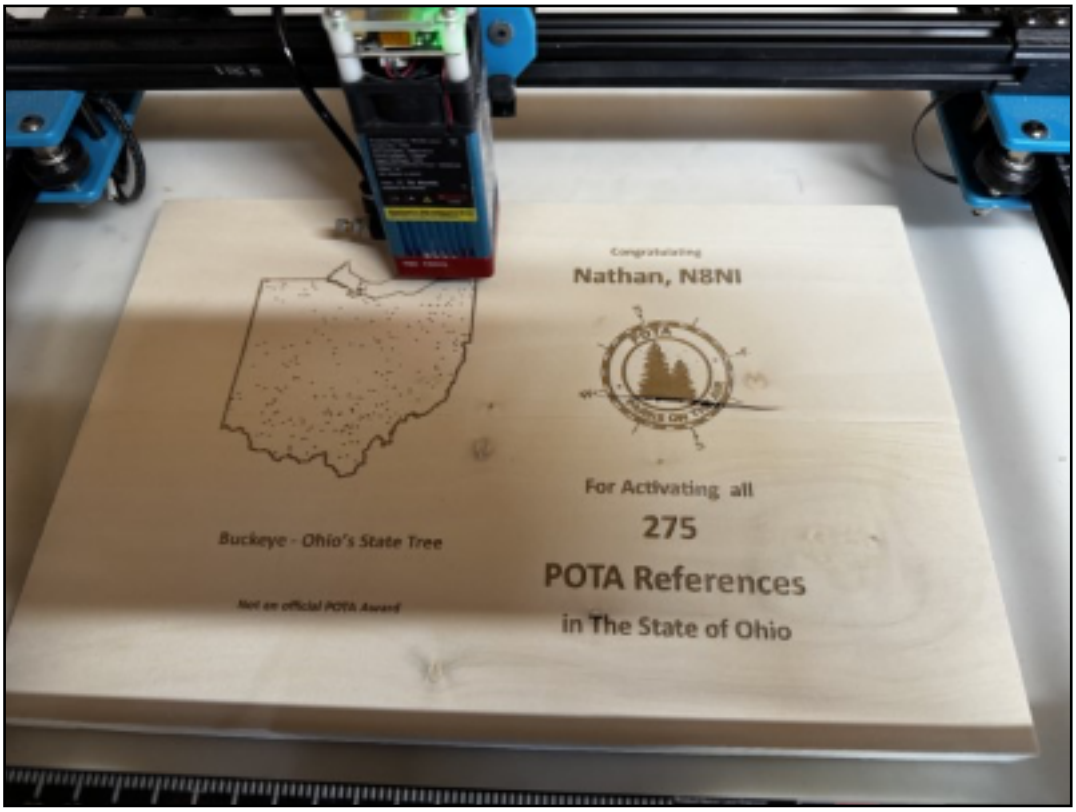
Last month, I decided to put the laser engraver to work, and etch some plaques. I bought this thing last spring, and set it up, but didn't do much more with it.

Sometime this year, I picked up some buckeye at the lumberyard. It's not exactly a hardwood, but it's an off-white color. According to the internet, it is supposed to be great for carving.

Those two things came together when I decided to do laser engraved plaques for those of us who've activated all POTA references in Ohio. That's three of us, and I had just enough Buckeye for the job.

Tune in next month for a write-up on my adventures during "Support Your Parks" (SYP) Weekend.

See you on the air! 73 DE WG8X



PCARS Welcomes Hal Turley in January

PCARS Meeting January 13, 2025

Please join us for the first PCARS meeting of 2025 on Monday January 13th at the American Legion post 496 located at 1945 Mogadore Rd. Kent, OH 44240. The meeting starts at 7:00PM *sharp!*

For our first meeting of the new year will welcome Mr. Hal Turley – W8HC of St Albans, WV. Hal is a world class Dxpeditioner, recently participating from N5J – Jarvis Island in August of 2024; CB0ZA – Robinson Crusoe Island in February of 2024 and E51D – North Cook Island in July of 2023 (among others!).

In February 2025 Hal will be participating in the TI1RRC; YN6RRC; H7RRC and 3F3RRC Central American RRC Tour: **https://www.qrz.com/db/TI1RRC** .

Most of us will never get the opportunity to hear the "pile-up" as the rare DX station being called – HAL will give you an idea of what it's like being on that end of the QSO and what it takes to get there, and back home!

Join us in Welcoming Hal to PCARS – Hal was last with us for the June meeting in 2019!

ARRL 160-Meter Contest

Gary, WP2RPW

I operated the ARRL 160-meter contest on December 7 & 8, 2024. I spent 22 out of 48 possible operating hours on the air. I can do this because usually sleep for 4 or 5 hours.

I had 562 Q's 79 multipliers 12 countries and I finished with a total score of 105,651. I have a remote station near Cleveland, Ohio where my Elmer, Jack N8BI, owns the station and I am a guest operator. We have been friends for 51 years.

Jack suggested we change my antenna classification to limited antennas based on the 160-meter antenna configuration. We did that and I noticed that by doing that my score put me in second place in the class I was in which was High Power with Limited Antennas. It will be interesting to see if I place in the overall contest.

Project Outreach

Jim, AC8NT

In 2024 we demonstrated ham radio, software defined radio and general electronics at 7 events. These included two science fairs, two libraries, two scout events, and the Air Expo at Kent State Airport. This year we are planning even more demonstration events with a growing schedule. These events are designed to introduce ham radio and electrical engineering to the community. The hope is to increase the ranks of ham radio operators and increase enrollment in engineering disciplines. These events are cosponsored by the Akron/Canton Section of IEEE. Teaming up with IEEE has gained us access to a broad range of presentation opportunities.

As with any event, I can always use help. If interested, please send me an email. Even if you help with only one event, you will help promote our great hobby.

The schedule now includes:

Event	Location	Date
Ham Radio Presentation	Middlefield Branch Geauga County Public Library	January 18
APS STEM Expo	Ellet High School, Akron	January 25
Brunswick Engineering Expo	Brunswick High School, Brunswick	February 4
Highland Engineering Expo	Highland High School, Medina	March (Date being finalized)
ACESS STEM Event, Akron University	University of Akron	March 11
Kent State Aero Expo	Kent State Airport	September 6
JOTA	Camp Mantoc	October 18

Events being finalized:

Event	Location	Date
Presentation on RF Technology	Kent Roosevelt High School	January
Yagi Antenna Build	Kent State Tuscarawas Electrical Engineering	March
Fox Hunt Antenna Build Radio Merit Badge Event	Hudson Scouts Troops 222 and 777	February

A New Antenna for KD8CGH

Bob KD8CGH posted to the PCARS groups.io site:

In August a storm blew down a large tree onto our roof. House damage aside, I lost the support for both my wire vertical and horizontal wire doublet. With the help of a friend I augured a 12" 3' deep hole and cemented a 3" ID pipe. Just before Christmas I set up a 43' heavy duty fiberglass mast from DX Engineering. I shortened the mast to 35' with a 17' whip on top to get a 58' vertical. A pulley at about 30 feet holds up the trusty doublet. Both are attached to a remote tuner at the corner of the garage.

Swap-N-Shop

FOR SALE: Yaesu FT-2000 160 - 6 Meter Transceiver with FH-2 Remote Control Keypad and CT-119 Programming Cable $800.00 for everything. Original boxes are available. Geocron GEO-4K-COMP2 new in the box $175. ARRL 10 - 40 Meter End Fed Antenna Kit new in the box $50. Contact Bob Hajdak N8QE at (330) 807-5903 or rhajdak@aol.com. [03/25]

FOR SALE: LDG Antenna Tuner 600 Pro Like new $300; Yaesu FT-840 Excellent condition and great for a new ham beginning HF. Still on air almost daily. $450. Call Carl, N4IT at 330-221-9725 [02/25]

FOR SALE: SteppIR 3 element yagi. Fully assembled but never in the air or on the air. I paid $1,951.20. Sell for half price. My loss, your gain. Bob Winston, W2THU, 216-924-3314 [01/25]

For Sale or Want Ad policy reminder: This is a PCARS ***members only benefit***. Please don't ask to list items for a friend, relative or SK estate unless they are/were a member of PCARS. Requests come in from all over the USA (and beyond) to list items for sale or wanted items and we just cannot dedicate that much space to non-members. Listings are good for 3 months unless canceled or changed earlier. The date listed after the contact information tells you when the ad expires - example: [01/25] indicates the ad will run until the end of January 2025.

PCARS Custom Coffee Cups - LIMITED EDITION! - Get One Now!

PCARS has obtained a limited number of special, custom-made coffee cups that are available only to members.

Supply is limited. If you are a current (PAID) member of PCARS you get one coffee cup for **FREE!!** The only catch is that you have to claim it from the **Treasurer**. There is a list of current members and the treasurer will check off your name when you get your **FREE** PCARS coffee cup.

There are a *very* **limited number of extra coffee cups** for sale at $5.00 each. **Contact the Treasurer for details: treasurer@portcars.org**

PCARS is on YouTube

That's right - PCARS is on YouTube. So what does that mean? Hey, we have a place to put all kids of videos that are about PCARS for the world to see.

https://youtube.com/@portagecountyamateurradios1933?si=09-NxUpDOoqdqTzc

Portable Operations Special Interest Group

Gene, W8NET
Portable Ops SIG Coordinator

Hello POTA fans! Thank you John, WG8X, for many years of service to PCARS, especially for this SIG! John has stepped down as the POTA SIG chairman (but will be still active!). I can't replace John, but we will still have fun!

Our first POTA SIG meeting will be on Tuesday **January 14, 2025** at 7:00-8:00pm. This is only 4 days away from our Winter POTA ParkPedition on Saturday January 18, 2025! Please be here to discuss any details, ideas, etc.

The Winter shindig last year was incredible - and incredibly COLD! We rented the same shelter as last year: Oak Tree Shelter in Wingfoot Lake State Park. Also, we will have TWO big heated tents this year! We will have hot food and drinks, snacks, etc. Setup will be at 9:00am (or earlier) and the event is 10:00am-3:00pm.

If you have any other suggestions, ideas about our Winter Parkpedition (or any POTA thoughts), please email me at w8net@me.com

Digital Special Interest Group

Rick, K8CAV
Digital SIG Coordinator

The next Digital Special Interest Group meeting will be held on Tuesday **January 7th** at 7:00 PM at the PCARS Club Site. It will also take place on Zoom, the Zoom link will be sent by QST email to club members prior to the meeting.

This month we will have a discussion about the challenges of properly setting drive levels when using FM, and some techniques using your radio to help set those levels.

As always, we'll be available to answer questions or provide help for any digital communications issue you may be having. I hope to see you there.

HF WAS & DX Nets Special Interest Group

Gene, W8NET
HF WAS & DX Nets SIG Coordinator

Greetings and Happy New Year!

The next meeting of the HF WAS & DX Nets SIG will be Tuesday **FEBRUARY 4, 2025** at 7:00pm. Look for a QST in late January for the details.

73 de W8NET Gene

Antenna Special Interest Group

Jim, AC8NT
Antenna SIG Coordinator

The next meeting of the Antenna Special Interest Group will be Tuesday **January 21** at 7 PM

Attendance will be available on Zoom. Details to follow in a QST.

Discussions at this meeting will focus on what attendee want to do going forward. We will also discuss training on the NanoVNA, TinySA and the equipment in the lab including our spectrum analyzer, new scope and signal generator.

As usual, bring any questions and comments on projects, equipment and operations. The discussions at these meetings are the best part.

I will be acting as interim coordinator for this SIG. If you know of anyone interested in leading this SIG, let me know.

See you on the 21st.

PCARS Flex Net

Rick, K8CAV
Flex Net Coordinator

The next PCARS Flex Net will be held on Wednesday January 8th at 8:00 PM. The net will be held on 160 meters Phone on LSB on 1852 kHz. If there are QSO's taking place at or very near we will adjust up or down to prevent QRM. Look for QST email prior to the net, and also monitor for K8BF calling the net. I hope to hear you there!

73, Rick K8CAV

Charlie the Tuner's DX High-Lites

Chuck, W8PT
aka "Charlie the Tuner"

Greetings DXers

Charlie the Tuner's DX High-Lites for January 2025

HAPPY NEW YEAR – 2025. That old adage, *"If I knew I was going to live this long, I'd have taken better care of myself*," is starting to make sense. Boy, I don't know about you but each year it gets harder to handle the cold WX. And until your blood thickens up for Winter, you can really feel the cold. At least I don't heat with wood anymore, so I'm not out in the snow using my chainsaw and getting frost bite on my toes and fingers as I did back in the '80s.

And I'm not crazy enough to believe that old hack about the best time to work on an antenna.

Looking ahead, there are a lot of folks with HAM gear heading to warmer climes. And they will be on the air hoping to hear a lot of us answering their CQs. Look for a lot of islands in sunny WX when these folks get on the air.

As always, big thanks to: The Daily DX, DL5ON & The DX News Letter, DXNews.com, DX-World.Net, 425 DX News, DXNL for the following DX information.

This report "could" contain "Pirate/SLIM" operation or more likely a "BUSTED CALLSIGN". As always, you never know, so… - **"Work First, Worry Later".**

Here's ClubLog's Top 10 Most wanted DXCC entities:

1. **P5 DPRK (NORTH KOREA)**
2. **BS7H SCARBOROUGH REEF**
3. **CE0X SAN FELIX ISLANDS**
4. **BV9P PRATAS ISLAND**
5. **KH7K KURE ISLAND**
6. **KH3 JOHNSTON ISLAND**
7. **3Y/P PETER 1 ISLAND**
8. **FT5/X KERGUELEN ISLAND**
9. **YV0 AVES ISLAND**
10. **3Y/B BOUVET ISLAND**

January…

3D2, FIJI. After his New Caledonia operation, Gerhard, OE3GEA will be QRV as 3D2GE from Nadi, IOTA OC-016, and Nacula, IOTA OC-156, until January 7, 2025. Activity will be holiday style on 30 to 10 meters using only CW. QSL to home call.

5N9, NIGERIA. 5N9DTG Team will be active from Abuja, Nigeria in January 2025. Team - Members of the Rebel DX Group. They will operate on 160 - 6m, CW, FT8 and possible SSB. QSL via ClubLog OQRS.

8R1, GUYANA. Aldir, PY1SAD will again be active from Georgetown, Guyana as **8R1TM** during January 1 to February 8, 2025. QRV on all bands; CW, SSB + digital & SAT. QSL via eQSL, LoTW or Direct. Grid: GJ06vs.

9Y4, TRINIDAD & TOBAGO. Earl, WA3DX plans activity from Bon Air Gardens, Arouca, Trinidad as **9Y4/ WA3DX** until January 14, 2025. QRV on 40-10m; FT8/FT4. QSL via WA3DX (direct).

CN, MOROCCO. Ralf, DB4REB is QRV as CN2REB until January 30, 2025. Activity is holiday style on the HF bands using CW, SSB, and FT8 from Agadir and also from some POTA locations along the coast. QSL direct to home call.

FM, MARTINIQUE. Dom, F4IFF will be active from Martinique (NA-107) as **FM/F4IFF** durlng January 19-27, 2025. QRV on HF bands; SSB & Digi, low power, verticals & wire antennas. QSL manager via EB7DX. Club Log livestream.

FO, FRENCH POLYNESIA. Hardy, DL7JLL is QRV as FO/DL7JLL from Mangareva Island, IOTA OC-063, and Pitcairn Is. as VP6JLL until January 15, 2025. Activity is on 20, 15, and 10 meters using SSB. QSL to home call.

J75, DOMINICA. J75K Team will be active from Dominica, IOTA NA - 101, until 4 January 2025. They will operate on 160 - 6m, CW, SSB, FT8. QSL via IV3JVJ direct, LOTW.

JD1, MINAMI TORISHIMA. Take, JG8NQJ is QRV as JG8NQJ/JD1 from Marcus Island, IOTA OC-073, until the beginning of March 2025. Activity is in his spare time on the HF bands using CW and FT8. QSL direct to JA8CJY.

JD1, OGASAWARA. Harry, JG7PSJ will be QRV as JD1BMH from Chichijima, IOTA AS-031, from December 23 to January 3, 2025. Activity will be on 80 to 10 meters using CW, SSB, and RTTY. QSL direct to home call.

KH0, MARIANA IS. Ken, JO1VRK plans to be active from Saipan, Mariana Islands as KH0/AJ6VJ until January 3, 2025. QRV 40-20-17-15-12-10m. QSL via LoTW, eQSL – email for home address for paper QSL.

KH9, WAKE ISLAND. Allen, KH7AL is QRV as KH7AL/KH9 while on work assignment. Activity is in his spare time on 40 to 10 meters using primarily SSB and CW. His length is stay is unknown. QSL direct to home call.

OE, AUSTRIA. Special event station OE65XMAS is QRV until January 6, 2025. QSL via bureau.

P4, ARUBA. Mat, DL4MM will be active again as P40AA from Aruba Island, IOTA SA - 036, 18 - 28 January 2025. He will operate on HF Bands, CW, SSB, FT8, including activity in CQ WW 160m CW. QSL via ClubLog OQRS.

PJ2, CURACAO. Andre, PD1DRE will be active from Curacao, SA-099 as **PJ2/PD1DRE** during January 14 to February 4, 2025. QRV on 40-20-10m, SSB. QSL via eQSL.

S5, SLOVENIA. Special event station S525PMC is QRV until January 5, 2025 to promote the PMC Contest, sponsored by the Radio Club Slovenj
Gradec. QSL only via e-QSL.

SP, POLAND. Special event call signs HF0CLAUS and SP0CLAUS are QRV until January 6, 2025. QSL via bureau.

TR, GABON. Roland, F8EN is QRV as TR8CR until the end of January 2025. Activity is on the HF bands using CW. QSL via F6AJA.

VP5, TURKS & CAICOS. Tony, WD8RTT, got in touch to say he will be travelling to Providenciales, Turks and Caicos at the end of January and will be doing some HF and Satellite radio operations while there as **VP5/KD8RTT**. Grid: FL31. Tony mentions you can find full details on his VP5 trip here. QSL via LoTW. He will be there until Feb. 2.

VU, INDIA. Kaustav, VU2UUU is QRV with special call sign AT2025 until January 15, 2025 while studying winter propagation, and monitoring solar cycle conditions. Activity is on the HF bands using CW and SSB. QSL via operator's instructions.

YB9, BALI IS. Emmanuel, F5LIT will be active again from Bali Island, IOTA OC-022, 28 January - 18 February 2025, as YB9/F5LIT. He will operate on HF Bands. QSL via home call direct, LOTW.

ZD7, ST. HELENA. Giovanni, IZ2DPX plans to be active from St Helena Island as **ZD7DPX** sometime in January 2025. Dates to be confirmed. QTH: ZD7CTO. QRV holiday-style on 160-6m; SSB & FT8/FT4. See here for preferred frequencies. QSL via IK2DUW, Club Log OQRS.

Look Ahead & Reminders…

D44, CAPE VERDE. Claudio, HB9OAU will be active from Sal island (AF-086), Cape Verde as **D44OA** during February 5-18, 2025. QRV holiday-style on 40-10m; SSB, CW and FT8 using EndFed 10-40m; Vert. Ribakov home made. QSL via LoTW, eQSL & QRZ.com.

FP, MIQUELON IS. Eric, FP/KV1J will be again active from Miquelon Island, IOTA NA-032, 28 June - 14 July 2025. He will operate on 80 - 6m SSB, RTTY, CW, FT8 and FM Satellites. He will be active in Canada Day, Marconi Memorial and IARU Contests.
QSL via home call, LOTW.

H44MS, SOLOMON ISLANDS. Bernard, DL2GAC will again be active from Manakwai village, nearby Malu'u (northern Malaita island) as **H44MS** starting February 9, 2025 lasting through until May 7th. Expected to QRV daily on 80-6m; SSB & FT8. QSL via home call, LoTW

TJ, CAMEROON. Thierry, TK1CX is QRV as TJ/TK1CX until the end of February 2025. Activity is in his spare time on 20 to 10 meters using mostly FT8 and low power. QSL via EA5ZD.

V6, KOSRAE, F.S.M. Rikk WE9G will be active from Kosrae, F.S.M (OC-059) as **V6WG** during March 18 to April 1, 2025. QRV (SO2R) on 80-6m, possibly 160m; mainly FT8/FT4 (MSHV & SuperFox) with some SSB & CW. QSL via H/c, Club Log OQRS. Grid: RJ15mi.

VK9, COCOS KEELING IS. VK9CU Team will be active from Cocos Keeling Islands, IOTA OC - 003, Australia, 4 - 11 March 2025. They will operate on 160 - 6m, CW, SSB, RTTY, FT4, FT8.
QSL via DL2AWG, LOTW, ClubLog OQRS.

YS1, EL SALVADOR. Dave, WJ2O will be active from La Libertad, El Salvador as **YS1/WJ2O** during February 12-19, 2025. QRV on HF bands; CW. Participation in the ARRL DX CW Contest as an all band, single op, low power entrant. QSL via N2ZN.

ZS7, ANTARCTICA. Oleg, ZS1ANF is QRV as ZS7ANF from Wolf's Fang Runway, IOTA AN-016, until February 2025. Activity is in his spare time on 40 to 10 meters using mostly CW. QSL via DL5EBE.

By now you know my usual disclaimer: These DX events can change due to various reasons that sometimes are out of the control of those who are doing the planning. Be patient. However, use this info to hunt down your ATNO or simply to work some DX before your rigs become boat anchors.

Get on the air and work some DX!! 73 for now….*Chuck W8PT aka Charlie the Tuner*

Young Ham Lends a Hand Contest - 2025

It's the time of year to send in your nominations for a worthy candidate for this contest that encourages one of the basic tenets of amateur radio; volunteerism. I am now accepting nominations to recognize a young licensed person, 19 years of age or younger who has gone above and beyond to help others.

Their works could be introducing other youth to radio, helping with an antenna installation, assisting with neighborhood projects, or helping with emergency communications. The winners will receive a $100 stipend sponsored by RCA Youth Activities, QCWA, and others.

If you know a young ham who is deserving of such an award, send your nomination, along with your reasons for the nomination directly to Carole Perry by April 1st. WB2MGP@gmail.com

PCARS IO Group

Members are reminded that PCARS has a IO Group site dedicated to PCARS. It's a great site to sign up for and get on the mailing list for important PCARS information.

Check out the PCARS IO Group at:
https://groups.io/g/PCARS

PCARS Christmas Party 2024

Mark Your Calendar!

PCARS January 2025 Schedule of Events	
January 6th	PCARS Board Meeting at PCARS Club Site - 7 PM
January 13th	PCARS Monthly Meeting - 7 PM
January 18th	POTA ParkPedition at Wingfoot Lake - 9 AM - 2 PM
January 23rd	Net Night at the Club Site - 6:30 PM - 10:00 PM

Special Interest Groups at the Club Site	
1st Tuesday Odd Months	Digital Special Interest Group - Moderator: Rick, K8CAV
1st Tuesday Even Months	HF WAS & DX Nets Special Interest Group - Moderator: Gene, W8NET
2nd Tuesday	Portable Ops Special Interest Group - Moderator: Gene, W8NET
3rd Tuesday	Antenna Special Interest Group - Moderator: Jim, AC8NT
4th Tuesday	DX & Contest Special Interest Group - Moderator: Chuck, W8PT
5th Tuesday	Could Be Anything Special Interest Group - Moderator: Rick, KD8WCK

Hamfest Calendar

01/19/2025 – Sunday Creek Amateur Radio Federation Hamfiest – Location: Shade, OH – Learn More

04/05/2025 – Cuyahoga Falls Amateur Radio Club 69th Hamfest – Location: Cuyahoga Falls, OH – Learn More

07/20/2025 – Van Wert Hamfest – Location: Van Wert, OH – Learn More

PCARS Patches & Stickers

PCARS logo patches (**iron on**) & stickers (stick on) are now available!

Put the patch on your had, your shirt, your jacket and show off that PCARS logo! The patch is about 3". The embroidery on the white patch is Red, Black, and Blue. Cost for a patch is $2.00 each and can be obtained at any PCARS meeting. There are 2 types of stickers available - a 4" x 6" oval and a 3" x 10" bumper sticker. Stickers are $1 each. Reach out to the club treasurer for details.

PCARS T-Shirts, Polo Shirts, Jackets, Hats, etc. can be obtained from:
Villager Business Solutions - attn. Michelle Zivoder - michelle@villagerbusiness.com - 330-472-7304.

PCARS Ham Radio License Plates Wanted!

Dig out that amateur radio call sign license plate (with your present call sign), clean it up and bring it to be permanently affixed to the wall in the PCARS club station!

We have 80 PCARS member's ham plates now, **but we can use more**. Don't have ham radio call plates on your vehicle? Well for those of you in Ohio, you can get the plates sent to you by going to any License Bureau office and filling out the special plate registration form. Have a copy of your current FCC license when you apply. The official form to obtain your Ohio Amateur Radio license plates is on the PCARS IO Group site. Then you'll have an old plate to bring in to get hung up as a ***permanent*** **part of PCARS history**.

From the Ohio BMV:

General Information: Owners or lessees of motor vehicles who are residents of Ohio and hold an unrevoked and unexpired official amateur radio station license issued by the Federal Communications Commission may apply for these plates. The official call letters will be the license plate numbers.

Registrant Eligibility: Owner must submit a copy of the un-revoked and unexpired official amateur radio license issued by the Federal Communications Commission. (FCC).

Title Requirements: Ohio Certificate of Title issued in the same name as the FCC license, either singly or jointly, or the name on the FCC license is the same name on the lease agreement.

Vehicle Information: These plates may be issued to passenger vehicles, non-commercial trucks, recreational vehicles, house vehicles and non-commercial trailers.

Type of Plates: Plates will be manufactured with the FCC license.

Issuance Information: Amateur Radio plates cannot be issued with system assigned, reserved, or personalized plate formats.

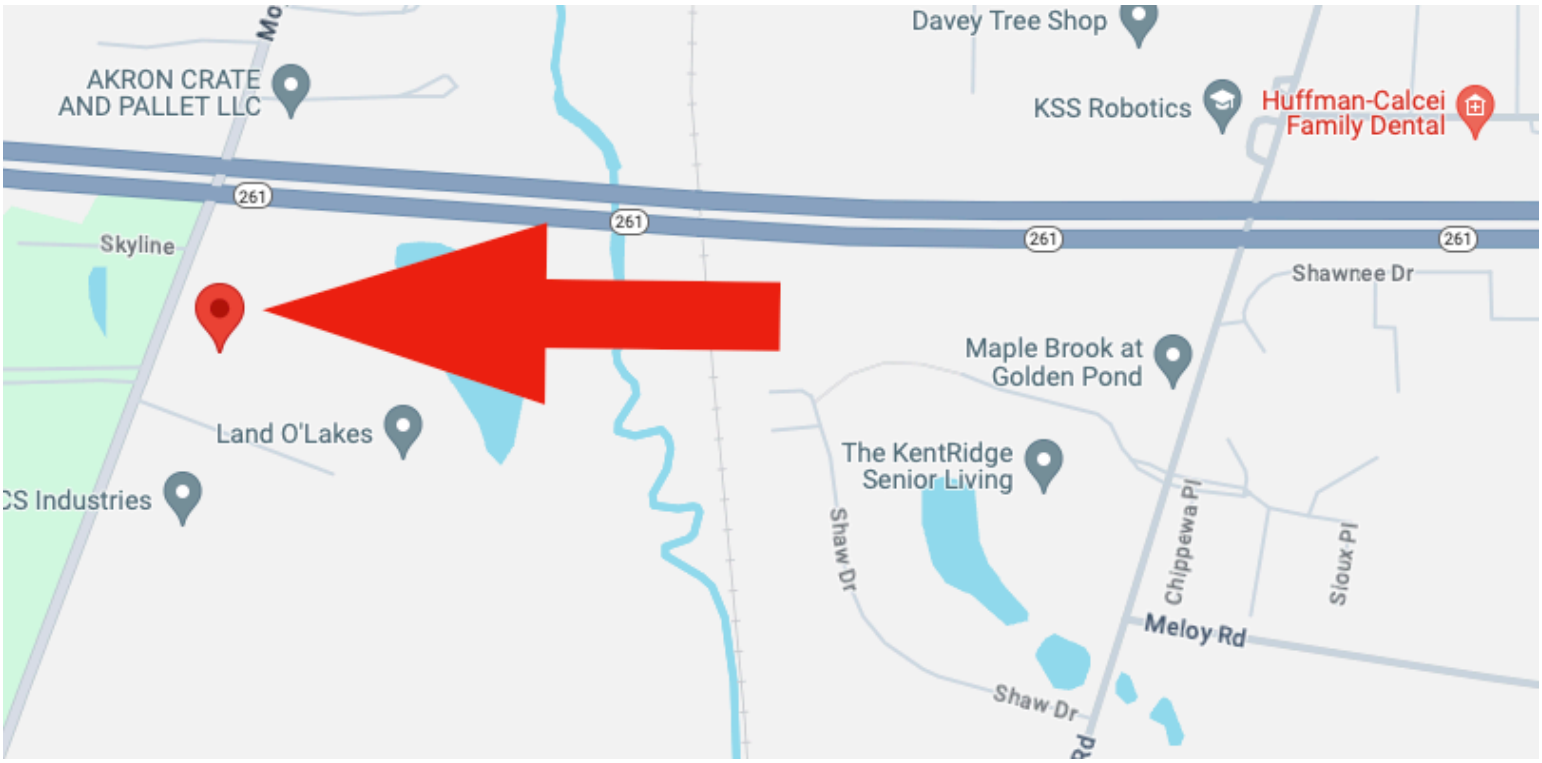
Renewal of plates can be done at your local Deputy Registrar or by mail using their renewal notice. Amateur Radio License Holders must provide a copy of their current unexpired and unrevoked official amateur radio license issued by the Federal Communications Commission (FCC) at the time of *any type renewal transaction*.

All plates will be mailed directly to the address on your registration card unless customer requests otherwise. The deputy will issue your registration card, stickers and provide you with a permit which will allow you to operate your vehicle while your plates are being manufactured. Special license plate applications are available at all Deputy Registrar license agency locations. These plates cost an additional $10.00 annually plus the normal registration fees. The fee is determined by Ohio Revised Code section 4503.14.

PCARS Meetings

The Portage County Amateur Radio Service (PCARS) in-person meetings are held the **2nd Monday** of each month and start at **7:00 PM**.

The meetings are held at The American Legion, Post 496
1945 Mogadore Road in Kent (Just South of Route 261)



The American Legion Post 496 is located on the southeast corner of State Route 261 and Mogadore Rd. The driveway is on the south side of the building and as you enter you will pass through a parking lot on the south side of the building. Please do not park in this lot but instead continue on to the parking lot on the east side of the building which is the near the rear entrance into the Post 'Canteen'. As you enter the post from this entrance you'll see a bar to the left and a dining area to the right. The meeting area we'll be in is on the right, to the rear of the dining area.

The menu consists of your basic burger / dog / chicken sandwiches, wings, fries, onion rings, and salads. There is also an appetizer selection as well. Adult beverages are available and costs are in line with what you would expect at most bar-restaurant facilities.

If you are a member of The American Legion, The American Legion Auxiliary, or the Sons of The American Legion, bring your ID card as you get a substantial discount on adult beverage pricing.

PCARS VE Testing Information & News

Tom, KB8UUZ
PCARS VE Team Liaison

Future Dates:
- February 4th
- April 4th
- June 5th
- August 8th

Check the website for the latest information

On behalf of the VE team at PCARS, we all look forward to seeing you at the PCARS club site in Ravenna so you can take your license test or an upgrade to your existing license. Face masks are not State/County mandated at this time, but you are always welcome to wear one.

PCARS VE sessions are scheduled for **9:45 am** Registration, **10:00 am** Testing starts, on the first Saturday of every even numbered month at the PCARS club site in Ravenna.

Any questions? Contact KB8UUZ@gmail.com

Quick Facts

- **Yes**, PCARS VE test Sessions are held at the club site in Ravenna starting at 10 am - see schedule.
- **Walk-Ins are accepted**. Would appreciate an email to KB8UUZ@GMAIL.COM if you plan on attending.
- You **MUST** have an **FRN Number** (SSNs no longer accepted) **Taking Technician Test?** - You **MUST** apply for your **FRN** and get it prior to testing
- You **MUST** have a **valid e-mail address** for the FCC to be able to contact you.
- Picture ID required
- Original and Copy of your valid FCC license and originals of any applicable CSCE
- **VE fee is $15** - Cash or Check payable to "ARRL-VEC"
- FCC License Fee $35 - payable after FCC sends you a link. DOES NOT APPLY to upgrades
- **17 years old or younger? VE Fee is $5** per the ARRL reduced CE fee Youth Program
- 17 years old or younger? ARRL will reimburse you the $35 FCC Fee

Okay - Now ***All*** the Details:

- If you are sick, have a cough, a high temperature or have been exposed to COVID-19 or other communicable germs, or someone that has been infected - please, *do not* come to the club site. *Use of masks is optional*.
- No food or snacks allowed.
- Ensure you have the following:
- A picture ID such as a valid Driver's License, State ID, School ID, or US Passport.
- If you are under 16 years of age, a parent or guardian must be able to vouch for you and you need a copy of your birth certificate (you do not have to give us a copy, we just have to see and verify).
- If you are upgrading to General or Extra - You MUST bring your original valid amateur radio license and a copy of your valid amateur radio license to turn in with your Form 605.
- Calculators are okay to use (if you need one) as long as the memories are cleared.
- NO cell Phones allowed.

First-Time Exam Applicants MUST Obtain FCC Registration Number BEFORE Taking Exam - All amateur examination applicants are required to provide an FCC Registration Number (FRN) to the Volunteer Examiners (VEs) BEFORE taking an amateur exam. This is necessary due to changes the FCC has made to its licensing system. Applicants will create an FCC username and account, respond to the verification email from FCC, and then register for the FRN. Register on the FCC's Commission Registration System (CORES): https://apps.fcc.gov/cores/

Email Addresses REQUIRED - All applications are required to contain an email address for FCC correspondence. Applicants will receive an email direct from the FCC with a link to the official electronic copy of their license whenever a license is issued or changed. ARRL VEC suggests that those without access to email to use the email address of a family member or friend. Licensees will be able to log in to the ULS using their FRN and password to download the latest version of their license at any time. The FCC no longer provides paper license documents via regular mail.

FCC - $35 Amateur Application Fee - The Federal Communications Commission (FCC) staff has clarified in response to an ARRL request that the new $35 application fee will **not apply** to **upgrade to an amateur radio licensee's operator class and changes to club station trustees**. The new fees will apply only to applications for a **new** license, **renewal**, rule waiver, or a **new vanity call sign**.

VECs and Volunteer Examiner (VE) teams will not collect the $35 fee at exam sessions. New **applicants will** pay the $15 exam session fee to the ARRL VE team as usual.

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate. The candidate will have **10 calendar days,** from the date of the application file number being issued, to pay. After the fee is paid, and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days.

Youth Licensing Grant Program - The ARRL Youth Licensing Grant Program, in effect since April 19, 2022, will cover the one-time $35 application fee for **new** amateur radio license candidates **17 years old or younger** for tests administered under the ARRL Volunteer Examiner Coordinator (VEC) program. The $35 Federal Communications Commission (FCC) application fee will be reimbursed after the ARRL VEC receives the completed reimbursement form and after the new license has been issued. The reimbursement check will be mailed to the fee payer. Also, candidates 17 years old or younger would pay a reduced exam session fee of $5 to the ARRL VE team at the time of the exam. The $5 fee is for all candidates 17 years old or younger, regardless of the exam level taken. Proof of under 18 status is required.

Visit the ARRL website for the program instructions and reimbursement form at www.arrl.org/youth-licensing-grant-program.

Thanks & 73

J.C., KC8JC
PCARS Newsletter Editor

Well, let's start with the obvious. I made a few changes to the look and feel of the newsletter this month. Think of it as a coat of paint or some mulch for that front bed in the yard. It's just a bit of a touch up for the new year. All of the Great Radiogram Goodness is still in here and we've had plenty to chew on as we roll into the new year.

The club is under some new management and there are already a number of great activities on the calendar. Even if one of those things isn't your usual cup of tea, I'd encourage you to come out and give it a try anyway. The worst that can happen is you end up spending time with your fellow club members. And at PCARS, that's always a good time!

Me? I've been doing some kit building and playing around with WSPR using my QMX+. It's something new to me as I never really tugged on the string of WSPR and what all of that aggregated data can show us. It's been fun to assemble the QMX+, figure out the beaconing feature, and watch as my 1.5 watt signal gets picked up as far away as Australia. For a guy who doesn't usually do much DX, that's pretty exciting.

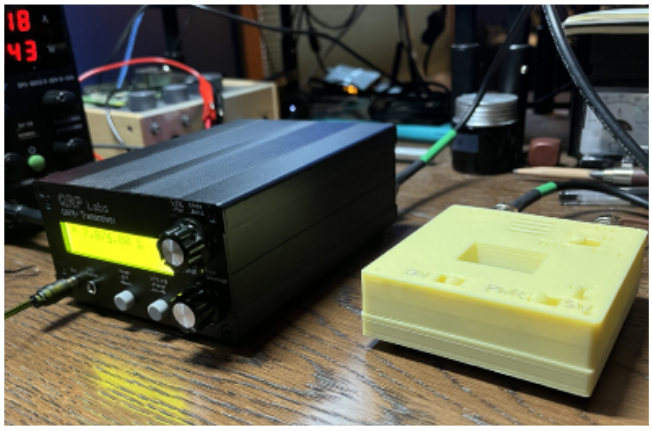
What is it that you've been playing with? Have you been eyeing any kits now that we're into winter? Did Santa bring you a reason to fire up the soldering iron? Or did you get your digital station up and running and start trying things like VarAC? You should tell us all about it! The Radiogram thrives on the input of our club members. The more you share, the more interesting it is.

Send all of your inputs to me at KC8JC@portcars.org in the form of plain text and full-size photos. We really want to hear all about it.

Thank you to all of those who sent inputs for this month's issue:

AC8NT, K8CAV, KB8UUZ, KP4VZ, W8NET, W8PT, WA8LRW,
WB2MGP. WB8LCD, WG8X, WP2RPW, and the World Wide Web.

Remember: With ***YOUR*** continued help, ***WE*** can keep making this a ***GREAT*** newsletter!



The Portage County Amateur Radio Service, Inc. (PCARS) - Ohio

~ The Hamvention® 2018 Club of the Year ~

PCARS meets the second Monday of each month at the Kent American Legion Post 496.
1945 Mogadore Rd. - just South of Rt. 261 - Enter the rear of the building for the meeting room.
Meeting starts at 7:00 PM. All are welcome to attend - Stop in and say hello!
PCARS uses the K8IV repeater: 146.895 PL 118.8 in Sugar Bush Knolls. - EchoLink Node: K8BF-L
Check PCARS out on the web: www.PORTCARS.org

2025 PCARS Officers

President - Jim Wilson - AC8NT
Vice President - Russ Williams - NR8W
Treasurer - Paul Hyland - KE8EGF
1 Year Trustee - Mike Ryan - KB8TUY
2 Year Trustee - Gene Marsh - W8NET
3 Year Trustee - Tom Parkinson - KB8UUZ
Past President - Mike Gonzalez - KP4VZ

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005

ARRL Affiliation
April 20, 2006

Special Service Club
March 22, 2010

2025 PCARS Appointments & Committees

ARRL Awards DXCC	W8KNO	Joe Wehner
Club Site Management	K8CAV	Rick Kruis
Contest Coordinator	W8PT	Chuck Patellis
EchoLink	AC8NT	Jim Wilson
Field Day Chairman	WA8AR	Tony Romito
FYAO Chairman	W8PT	Chuck Patellis
K8BF Callsign Trustee	N8QE	Bob Hajdak
K8BF QSL Manager	N8QE	Bob Hajdak
Membership Chairman	-	-
Net Control Coordinator	KA8TOA	Greg Ash
Newsletter Editor	KC8JC	J.C. Wilson
OSPOTA Chairman	KB8UUZ	Tom Parkinson
PCARS Photographer	-	-
Public Information Officer	-	-
Secretary	-	-
Social Media	N8WCP	Mike Szabo
Tech, Gen, & Extra Class Mgr.	AC8NT	Jim Wilson
Volunteer Examiner Liaison	KB8UUZ	Tom Parkinson
Webmaster	KP4VZ	Mike Gonzalez
POTA Coordinator	KE8ARB	Brandon Mercer

Active PCARS Volunteer Examiner Team Members

KB8UUZ	Tom Parkinson
AC8NT	Jim Wilson
AC8QG	Nick Wagner
N8QE	Bob Hajdak
KA8TOA	Greg Ash
WA8CCU	Al Nagy
N8FUM	Dan Torchia
KC8JC	J.C. Wilson
W8EC	Mark Haas
K8IG	Fred Freer
W8HFZ	Tim McLeod
K8PJW	Phil Weiss
N8XTH	Deron Boring
K8IV	Ed Polack
N8AMY	Amy Leggiero
W8PT	Chuck Patellis
KP4VZ	Mike Gonzalez

THE RADIOGRAM

The RADIOGRAM copyright ©2025, is the official newsletter of the Portage County Amateur Radio Service, Inc. (PCARS). The RADIOGRAM is an Award Winning newsletter: ARRL Ohio Section Newsletter - Fourth Place 2024 - Third Place 2015, 2022 - Second Place 2014, 2016, 2020 - First Place 2012, 2013, 2017, 2018, 2019, 2021, 2023. ARRL Great Lakes Division Newsletter - Second Place 2013 - First Place in the 2017, 2020 and 2021.

Articles are the opinion of the authors and not necessarily those of PCARS. Or, better yet, let me express it this way: "These are my opinions and only my opinions, unless you share them as well, which would make them our opinions, but I am not of the opinion that I can express your opinion as my opinion without your prior expression of said opinion, and then my re-utterance of that opinion would, in my opinion, be foolish unless I were expressing agreement to your opinion, and then it wouldn't be my opinion but your opinion to which I only agree." **GO AHEAD - STEAL THIS NEWSLETTER!** You have our permission to post, e-mail, copy, print, or reproduce this newsletter as many times as you like, but please do not modify what you use. If you use material in this newsletter, all we ask is that you give credit to PCARS along with the author of the article. Caution - some of the articles in this newsletter maybe covered by copyright - please do not copy and use the ones that have by-line information unless you obtain permission from the original author. If you're not sure, drop an e-mail to KC8JC@portcars.org. The RADIOGRAM always obtains written permission for reproducing copyright material. The RADIOGRAM comes out the first day of each month (usually). ARES® (Amateur Radio Emergency Service®) is a program of, and both logos are registered trademarks (used with permission) of the American Radio Relay League, Inc. ARRL, the National Association for Amateur Radio™. Why the Black Squirrel in our logo? For those of you not familiar with it: The Black Squirrel is commonly seen around Portage County, Ohio. Legend has it that some of these little guys and gals got loose from Kent State University back in 1961 and they migrated and thrived throughout our county. Look into the black squirrel legends and see what you find! When you spot a black squirrel – think PCARS!

The RADIOGRAM is published every month and only sent to subscribers. If you would prefer not to receive this newsletter, we understand. We'll try not to take it personally. It's not you saying you don't like us, but maybe you just don't have the time to look at all this hard work we've done just for you. Hey, that's cool. But if your heart is truly set on making sure you no longer receive this newsletter, even though we promise to one day reveal the meaning of life in it and you're going to be really upset when you miss out on that, we can take you off the e-mail list. Send your newsletter inputs (in .TXT format) along with in-focus pictures (not small 50 kb photos) to the newsletter editor: KC8JC@portcars.org

Portage County Amateur Radio Service (PCARS)
705 Oakwood Street - Box 12
Ravenna, OH 44266 USA